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Gastric Motility in Vitamin Deficiency

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mal is confined in an air-tight vessel also gave results which indicate that the fish uses the air in respiration.

(Preliminary report.)

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GASTRIC MOTILITY IN VITAMIN DEFICIENCY

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Guinea pigs in vitamin C deficiency and dogs in vitamin B deficiency were studied.

I. Guinea pigs:

The emptying time of the stomach after a standard barium meal was determined by means of the X-ray. The experiments were conducted upon four groups of twelve animals each as follows:

	CONTROLS	CHRONIC SCURVY	ACUTE SCURVY
NUMBER OF ANIMALS	16	12	16
Ration	Basal ration plus 4 to 5 cc. orange juice daily	Basal ration plus 0.5 cc. orange juice daily	Basal ration only
Total number of x-ray observations	84	58	50
Average emptying time in minutes	110	113	116

The observations show that the emptying time of the stomach in experimental scurvy is not significantly different from the emptying time in normal control animals.

II. Dogs:

Dogs were fed beri beri producing diets and after loss of appetite for the diet gastric peristalsis was studied by Carlson's balloon method. Graphic records from the stomach of animals before being placed upon the diet — compared to records from the same animals in a state of anorexia, after 100 days on the vitamin B deficient ration, demonstrate the same type of gastric peristalsis. Spastic paralysis develops after the period of pseudo-anorexia. When in this state a hunger balloon cannot be kept in the stomach long enough to obtain records.

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